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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,539	04/28/2000	Roy Curtiss III	3116-4355	3756
75	90 11/20/2001			
Howell & Haferkamp LC Patents Trademarks Copyrights Unfair Competition Suite 1400 Pierre Laclede Center 7733 Forsyth Boulevard Saint Louis, MO 63105-1817			EXAMINER	
			PORTNER, VIRGINIA ALLEN	
			ART UNIT	PAPER NUMBER
,			1645	10
			DATE MAILED: 11/20/2001	12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/560,539 Applicant(s)

Examiner

Curtiss III Art Unit

Portner

1645

The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	
communication.	eation. 5, a reply within the statutory minimum of thirty (30) days will 9, period will apply and will expire SIX (6) MONTHS from the mailing date of this
	y statute, cause the application to become ABANDONED (35 U.S.C. § 133). e mailing date of this communication, even if timely filed, may reduce any
Status	
1) Responsive to communication(s) filed on Sep 6, 20	001
2a) ☐ This action is FINAL . 2b) ☒ This ac	tion is non-final.
3) Since this application is in condition for allowance closed in accordance with the practice under Ex pa	except for formal matters, prosecution as to the merits is arte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) X Claim(s) 2-8, 12-22, and 32-37	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5) Claim(s)	is/are allowed.
6) Claim(s)	1
7)	· · · · · · · · · · · · · · · · · · ·
	are subject to restriction and/or election requirement.
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/are	e objected to by the Examiner.
11) The proposed drawing correction filed on	is: a)□ approved b)□ disapproved.
12) The oath or declaration is objected to by the Exam	niner.
Priority under 35 U.S.C. § 119	
13) Acknowledgement is made of a claim for foreign p	priority under 35 U.S.C. § 119(a)-(d).
a)□ All b)□ Some* c)□ None of:	
1. Certified copies of the priority documents have	ve been received.
2. Certified copies of the priority documents have	ve been received in Application No
3. Copies of the certified copies of the priority of application from the International Bure *See the attached detailed Office action for a list of the action for a list o	
14) Acknowledgement is made of a claim for domestic	
Attachment(s)	
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20] Other:

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DETAILED ACTION

Claims 1, 9-11, 23-31 and 38 have been canceled.

Claims 2-8, 12-22, 32-37 are pending and under consideration.

Please Note:

The previous Election/Restriction made of record in paper number 10, is herein vacated in

light of Applicant's arguments and the examiner's realization that the species set forth in the prior

Election/Restriction were not clear, wherein a single combination for each of the reagents in the

independent claim should have been elected. The requirement was not based upon the reagents

set forth in the generic claims. The following Election/Restriction will address this requirement.

Election/Restriction

1. Claims 2-8, 12-22 and 32-37, drawn to a microorganism, a vector, first control sequence,

second control sequence, an activate able control sequence, a first origin of replication, a second

origin of replication, a first repressor, a gene that encodes a desired product classified in class

435, subclass 69.3.

2. This application contains claims directed to the following patentably distinct species of the

claimed invention: Applicant is requested to elect a single species for each of the reagents recited

in the independent claim that evidences original descriptive support and is taught to be an

embodiment within the scope of the claimed invention disclosed in the instant specification:

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Microorganism:

- I. Viruses
- II. Protozoa
- III. Unicellular fungi
- IV. Bacteria:
- V. Runaway vector (claim 21)

Vector:

plasmid (page 15, lines 23-28 and page 17, lines 17-26)

First Control sequence:

P22Pr, mal, lac, tac, cspA, phoA, P_{bad} (araCPbad), trc, λPL, eukaryotic, luxI, lasB, traA, traI(page 24, lines 15-16), virB (page 25, line 20),

Second Control sequence:

P22Pr, mal, lac, tac, cspA, phoA, P_{bad} (araCPbad), trc, λPL, eukaryotic, luxI, lasB, traA, traI(page 24, lines 15-16),virB (page 25, line 20)

First Activate able Control (inducer) sequence:

P22Pr, mal, lac, tac, cspA, phoA, P_{bad} (araCPbad), trc, λPL, eukaryotic,

First Repressor sequence:

malT(page 27, line 18), LacI, C2, C22 (page 19, lines 25-26), P_R , P_{trc} , ara CP_{BAD} , C1857 (page 26, line 9)

First origin of replication:

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pSC ori, pUC ori.

Second origin of replication:

pSC ori, pUC ori

Other optional elections recited generically in dependent claims:

3. Claim 6 broadly recites the term attenuated. If attenuated elected a specific <u>mutations</u> to <u>attenuate</u>:

Δ end	$\Delta hem A$	ΔDAP (page 4, instant specification, bacteria)	Δ galR
Δcya	ΔaroA	ΔrpoS (page 5, instant specification, bacteria)	ΔAcdt
Δcrp	ΔaroC	Δasd (page 6, instant specification, bacteria	
ΔphoPQ	ΔaroD	ΔaraCBAD (page 11, instant specification)	
Δ ompR	Δ hrt A	ΔaraE (page 11, instant specification)	
A 150 (

ΔgalE (page 4, instant specification, bacteria)

- 4. Claim 22 defines the type of expression the microorganism will have:
 - A. high copy number
 - B. low copy number
 - C. delayed expression of antigen

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently claims 2-4, 6, 19, and 22 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the

fee required under 37 CFR 1.17(I).

7. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Ginny Portner whose telephone number is (703)308-7543. The examiner

can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM except for the first

Friday of each two week period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Lynette Smith, can be reached on (703) 308-3909. The fax phone number for this group is (703)

308-4242.

The Group and/or Art Unit location of your application in the PTO will be Group Art

Unit 1645. To aid in correlating any papers for this application, all further correspondence

regarding this application should be directed to this Art Unit.

Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 308-0196.

Vgp

November 14, 2001

LYNETTE A. F. SMITH SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600 Page 6